

## GREAT Expectations: Promoting Active and Collaborative Learning in Online and Face-to-face Courses

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### Bibliography

Boswell, S.S. (2012). I “deserve” success: Academic entitlement attitudes and their relationships with course self-efficacy, social networking, and demographic variables. *Social Psychology of Education*, 15 (3), 353-365.

Brill, J.M. and Hodges, C.B. (2011). Investigating peer review as an intentional learning strategy to foster collaborative knowledge-building in students of instructional design. *International Journal of Teaching and Learning in Higher Education*, 23 (1), 114-118.

Clauss, J. and Geedey, K. (2012). Knowledge surveys: Students ability to self-assess. *Journal of the Scholarship of Teaching and Learning*, 10 (2), 14-24.

Culver, S. (2010). Course grades, quality of student engagement, and students’ evaluation of instructor. *International Journal of Teaching and Learning in Higher Education*, 22 (3), 331-336.

De Grez, L., Valcke, M. and Roozen, I. (2012). How effective are self- and peer assessment of oral presentation skills compared with teachers’ assessments? *Active Learning in Higher Education*, 13 (2), 129-142.

DeWitt, J.R. (2010). Using collaborative research projects to facilitate active learning in methods courses. *Journal of Faculty Development*, 24 (1), 19-26.

Fritz, J. (2011). Classroom walls that talk: Using online course activity data of successful students to raise self-awareness of underperforming peers. *The Internet and Higher Education*, 14 (2), 89-97.

Griesbaum, J. and Gortz, M. (2010). Using feedback to enhance collaborative learning: An exploratory study concerning the added value of a self- and peer-assessment by first-year students in a blended learning lecture. *International Journal on E-Learning*, 9 (4), 481-503.

Kahiigi, E.K. et al. (2012). Peer assignment review process for collaborative e-learning: Is the student learning process changing? *International Journal of Advanced Computer Science and Applications*, 3 (12), 149-155.

Lippmann, S., Bulanda, R.E. and Wagenaar, T.C. (2009). Student entitlement: Issues and strategies for confronting entitlement in the classroom and beyond. *College Teaching*, 57 (4), 197-204.

Pinheiro, M. and Simoes, D. (2012). Constructing knowledge: An experience of active and collaborative learning in ICT classrooms. *TOIET: The Turkish Online Journal of Educational Technology*, 11 (4), 382-389.

Sondergaard, H. and Mulder, R.A. (2012). Collaborative learning through formative peer review: Pedagogy, programs and potential. *Computer Science Education*, 22 (4), 343-367.

Wang, M. (2010). Online collaboration and offline interaction between students using asynchronous tools in blended learning. *Australasian Journal of Educational Technology*, 26 (6), 830-846.

Wolfe, A. (2012). Implementing collaborative learning methods in the political science classroom. *Journal of Political Science Education*, 8 (4), 420-432.

## “G” Stands for Group Work

### Sample Group Project

#### ■ General Description

This comprehensive project requires you to create a data-driven, interactive Web application with PHP and MySQL. This project will allow you to convey a system from idea phase to implementation. The project will provide you with experience in designing and developing a Web application using the most popular software design pattern -- MVC.

Furthermore, this team project will create a collaborative learning environment and thus will enrich your team-work experience.

Start the project by identifying a real-world system and then create a software system (a PHP Web application in this project) to model the real-world system. You will need to use OOP objects to model the system's underlying business logic. The system's presentation layer and business logic should be separated. The data layer of the application should be implemented with a MySQL database. The project will include three components: coding, documentation, and presentation. They make up 20% of your final course grade.

#### ■ Team Composition

This is a team project. Each team may freely choose three or four members from the class.

#### ■ Presentation and Promotion

Each team will need to present and promote your Web site to the whole class. The presentation should be between 10 to 15 minutes long and you will have 5 additional minutes for questions. Make PowerPoint Presentations, handouts if necessary. Think of yourself as a market person and think how you want to promote your site.

## Grading Rubric

Team:

Member:

Activities		Points possible	Your points	Comments
Proposal		10		
First draft		5		
Second draft		5		
> ω	Documentation	10		

	Presentation	10		
	Coding			
	Site organization, navigation system, consistent style	5		
	OOP implementation, MVC design	10		
	AJAX technology	10		
	User authentication	5		
	Data layer integration	5		
	Error handling	5		
	Functionality, creativity, and performance	20		
<b>Total</b>		<b>100</b>		
<b>Adjusted total based on peer evaluation</b>				

“R” Stands for Reflection

## Class Participation Self-Evaluation

Learning is not a passive process. All learning requires active participation. Participation is required in this course and is worth 10% of your course grade. Your participation is assessed in the following areas in addition to your attendance. Use the scoring guide below to give yourself a class participation grade for this week's classes. Your instructor will also assess your participation using the same rubric. Your self-evaluation scores will be used as a reference when your class grade is determined by your instructor.

Name \_\_\_\_\_

Date \_\_\_\_\_

	<b>Developing, but below expectations (0 – 2 points)</b>	<b>Accomplished/ Meets expectations (3 points)</b>	<b>Exemplary/ Displays leadership (4 points)</b>	<b>Score</b>
<b>Engagement</b>	I infrequently or never contribute to class discussion, ask any relevant question, or respond to others' questions.	I contribute to class discussion, ask relevant questions, or respond to others' questions at least 2 times in each class.	I proactively and regularly contribute to class discussions, ask relevant questions, or respond to others' questions 3 or more times in each class.	
<b>Attention</b>	I sometimes do not pay attention/respectfully listen to my instructor or peers.	I rarely fail to pay attention/respectfully listen to my instructor or peers.	I actively and respectfully listen to my instructor and peers and maintain full engagement throughout class.	
<b>Behavior</b>	I sometimes display disruptive or inappropriate behavior in class. I sometimes use my smart phone or laptop to conduct course unrelated activities.	I rarely display disruptive or inappropriate behavior in class. I never use my smart phone or laptop to conduct course unrelated activities.	I never display disruptive or inappropriate behavior in class. I never use my smart phone or laptop to conduct course unrelated activities.	

“E” Stands for Evaluation of Self and Peers

**Peer Evaluation Form**

The purpose of this form is for you to evaluate contribution made by each of your group members to the overall performance and success of your group's project. In making your assessments, please take into account following items:

- Item 1: The member contributed fair share of workload.
- Item 2: The member made good quality of contribution.
- Item 3: The member was reliable and well prepared for group meetings.
- Item 4: The member met deadlines set forth by the team.
- Item 5: The member showed great degree of cooperation with other group members.

Do not rate yourself. Rate other group members using a one to five point scale. Use the table below to record your ratings. Use one column for each member. ***Your ratings will not be disclosed to other students.*** Be honest in this evaluation!

(5=strongly agree, 1=strongly disagree)

Name			
Item 1			
Item 2			
Item 3			
Item 4			
Item 5			
Total points (25 maximum)			
Additional comments			

## Discussion Forums

In online courses: class is divided in half

Half of the students participate in the Discussion Forum questions for the odd-numbered Modules and the other half of the class participates in the Discussion Forum questions for the even-numbered Modules.

One of the questions for each weekly Module is to select a student from the previous Module and provide feedback on his/her responses to the Discussion Forum questions for the previous Module.

That way, students have more feedback than just what is provided by the faculty member and the TA.

As the semester moves forward, some of the students who provide the most robust responses tend to receive the most feedback from other students (an additional incentive) – and points are taken off if students do not provide this feedback.

Sample questions from courses:

- Go to the responses for the Discussion Forum questions for Module 9. Select one student's response. What were some of the student's comments about the role of physical and personnel security as part of an overall information security plan? What could a company face? What solutions or strategies did the student suggest? Are there other things the company could do that were not mentioned by the student or in the reading assignment?
- Go to the responses for the Discussion Forum questions for Module 6. Select one student's response. How would you describe this student's views on the ethical and legal issues with intellectual property especially as it relates to technology? Which journal article did the student summarize and what is one take-away point from this student's response to the article? What other issues need to be considered?

“A” Stands for Application of Course Content to Real-World Problems

### Case Study

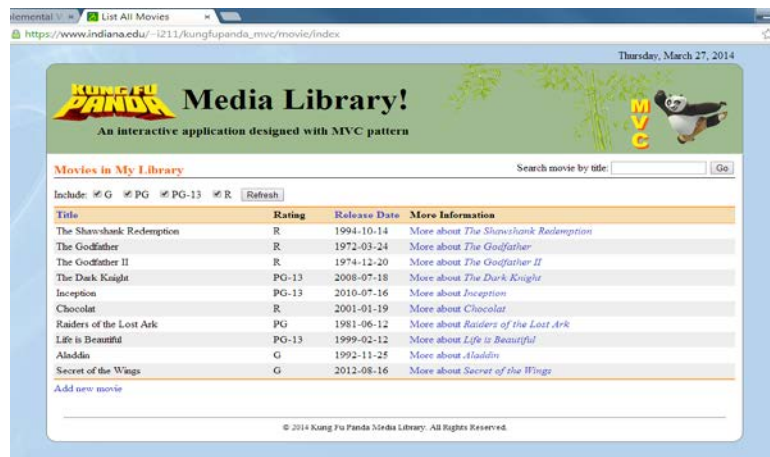
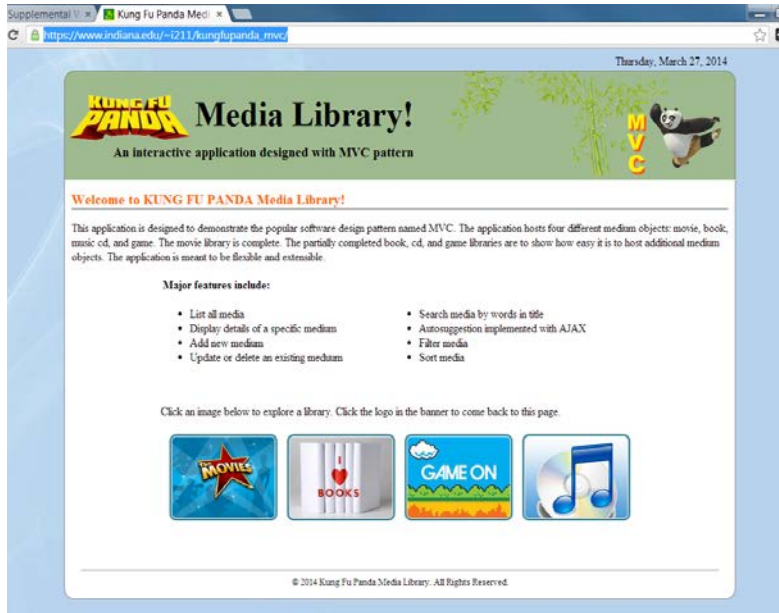
Pretend you have been hired as an Informatics/IT/Information Security professional for a medium-sized company, ABC Corporation, which has operations in California, Nevada and Arizona. ABC Corporation also has a location in Mexico. Mr. Michael Jones is ABC Corporation’s President. Although he and his leadership team had previously been satisfied with their company’s information security and privacy policies and practices, their confidence has been shaken by the recent hacking and other security breaches experienced by Target, Michael’s and the some of the hotels in the Marriott chain. Mr. Jones has asked for a memorandum from you that he can share with his leadership team. The next board meeting for ABC Corporation is on Friday, March 14 at 5:00 p.m.

Please discuss some of the information security and privacy protections we need to have in place at ABC Corporation as outlined in the following questions.

1. The company’s leadership team is especially interested in:
  - any requirements for security breach disclosure, notification and reporting at the state or federal level.
  - whether there are any laws that mandate encryption and if not, your assessment of whether encryption should be used anyway and in what situations.
  - what state and federal laws say about our need to protect health, financial and personal information about our employees.
2. With operations in Mexico, we also need information on that country’s laws and regulations on information security and privacy.
3. What special considerations are needed for cloud computing, wireless and third-party vendors who may be providing services or entering our premises?
4. What suggestions can you make about our company’s physical security measures?
5. What strategies for information security and privacy should be considered with respect to our employees?
6. What legal actions could unhappy customers take against us in the event of a data breach or other security measure?
7. What actions could other parties (such as the state attorneys general or the FTC) pursue?
8. What might the penalties be?
9. What other difficulties could our company face if there is a data breach or other security incident?
10. What are the legal and ethical duties of the officers and directors in protecting the company from data breaches and other security incidents? What are these duties, how are they breached and what is the standard of conduct?



## Creating Applications



“T” Stands for Testing (Pre- and Post-Testing)

## **Comparing Changes in Views from Beginning of Semester with End of the Semester**

Step 1: Access your responses to the **Pre-Test** on Computer and Information Ethics and the **Post-Test** on Computer and Information Ethics through the Test and Survey link in OnCourse.

Step 2: Carefully compare your responses to the questions on the Pre-Test and Post-Test to see how your responses changed during the semester.

Step 3: Write a paper where you reflect on your responses:

1. Select three (3) questions where your response to the question did not change or changed only slightly or changed the least between the Pre-Test and the Post-Test.
  - What was the situation or scenario presented in the question?
  - Explain why your response to that situation or scenario did not change or changed only slightly or changed the least between the Pre-Test and Post-Test.
  - What other information or considerations might have influenced your response?
2. Select three (3) questions where your response to the question changed in a more significant way or changed the most between the Pre-Test and the Post-Test.
  - What was the situation or scenario presented in the question?
  - Explain why your response to that situation or scenario changed in a more significant way or changed the most between the Pre-Test and Post-Test.
  - What other information or considerations might have influenced your response?
3. As a whole, did your responses to the questions trend more harshly (finding the behaviors in the questions more likely to be illegal or unethical) or more liberally (finding the behaviors in the questions more likely to be ethical or acceptable) from the Pre-Test to the Post-Test?
  - If so, what accounted for your revised views?
  - If not, why did your views not show a trend in one direction or the other?
4. Do you believe that you are prepared to address the ethical situations that you might be confronted with as an informatics professional, an IT professional or a professional in whatever career field you are pursuing? Why or why not?
5. What other information/training/resources would be helpful in preparing you for making ethical decisions in your career? Please provide some suggestions.